Clinic Protocol – Words-in-Noise & Words-in-Quiet

1. **Calibration** - Using Track 1 of the Clinic Speech Perception Materials, Vol. 1 CD, calibrate both channels of the audiometer to 0 vu. The audiometer set up for calibration is as follows

Channel 1	*Channel 2*
External B	External A
Phone	Phone
-10 dB (dial)	-10 dB (dial)
Interrupt-on	Interrupt-on

   For each ear, words-in-quiet are presented at two levels followed by the words-in-babble. This order familiarizes the patient with the materials in the easier condition (quiet) before the more difficult condition (babble). Test the better ear first. Channel 1 is for the test stimuli and Channel 2 is to monitor the test stimuli and the responses of the patient. Before testing, the two questions (quiet and noise) should be asked.

2. **NU 6 in Quiet** - Half lists (25 words) are presented at the two levels that approximate the highest and the lowest presentation levels of the words-in-babble. Thus, for a pure-tone average **≤**40-dB HL, lists in quiet are presented at 60- and 84-dB HL. For pure-tone averages >40-dB HL, lists in quiet are presented at 70- and 94-dB HL (ensure that the 94-dB HL presentation is below the UCL/ULL).

3. **Words-in-Noise (WIN)—***With the pure tone calibrated to 0 vu (0 dB), the babble is 20 dB below the level of the calibration tone indicated on the monitoring meter*. The words-in-noise are on the left channel and the words-in-quiet at a constant level are on the right channel for monitoring purposes. The score sheet selected determines the tracks that are presented (i.e., if the next score sheet is for Tracks 3 and 4, then those tracks are presented to the patient). The words-in-noise testing is completed under headphones. The audiometer set up for words-in-noise is as follows:

Words-in-Noise

Channel 1	*Channel 2*
External B	External A
Phone	Phone
Ear (left or right)	Non test ear
80 or 90 dB (dial) [1]	-10 dB (dial)
Interrupt-on	Interrupt-on (for monitoring)

[1]The presentation level for words-in-noise is determined from the following:

a) **Pure-tone average ≤40-dB HL—**the hearing dial is set to 80 dB. This puts the babble at 80-dB SPL (60-dB HL) with the words ranging from 104-dB SPL (84-dB HL) to 80-dB SPL (60-dB HL).

b) **Pure-tone average >40-dB HL to 59-dB HL—**the hearing dial is set to 90 dB. This puts the babble at 90-dB SPL (70-dB HL) with the words ranging from 114-dB SPL (94-dB HL) to 90-dB SPL (70-dB HL).

c) **Pure-tone average ≥60-dB HL—**do not run words-in-babble as we have no data yet on individuals with PTAs above 60-dB HL. Run only words-in-quiet.

Scoring Words-in-Noise – The number of words repeated correctly is counted for each signal-to-babble ratio and plotted on the graph in the bottom left corner of the audiogram. The scores for each level are then added to determine the total correct and the threshold is obtained from the chart on the score sheet. The thresholds correspond to the descriptors located in the bottom left corner of the audiogram and will be used to determine if the patient's word-recognition ability in background noise is mild, moderate, severe, or profound.